

of development--would be compatible with such a preferential defense. While CBO has not estimated the cost of an MX system defended by anti-ballistic missile interceptors, it could prove lower than some of those in Table 6. For fiscal year 1981, the Congress approved \$282 million for research and development on anti-ballistic missile technology.

It is also possible that environmental or other concerns could prevent deployment of a large number of horizontal shelters. Should this occur, the Congress might decide to deploy some MX missiles in fixed silos, quite possibly modified Minuteman silos. A LoADs anti-ballistic missile system would then probably have to be added to protect the MX missiles. This option was raised in a recent nongovernmental study. 17/

Despite ABM's promise, a number of critical questions must be answered before the United States can proceed with these or other ABM systems. What will they cost? What are the technical risks? Will construction of an ABM system delay the MX program? Finally, deployment of any viable ABM system would almost certainly require abrogation of an existing U.S.-Soviet ABM treaty. While the treaty is subject to review in 1982, abrogation might be viewed as a setback for the arms limitation process.

Trident II Missile

The Congress might wish to hedge against problems in the MX program. Or it might want to expand U.S. strategic forces to match Soviet initiatives. In either case, the Congress might elect to accelerate the development of the Trident II submarine-launched ballistic missile program.

The Trident II missile might be an important hedge for several reasons. Its larger size means it could carry more warheads and/or have greater range than the Trident I missile. It could also potentially carry warheads with a larger explosive yield. In addition, the advanced guidance system on the Trident II would be designed to give it greater accuracy than Trident I at equal range. With its potentially larger yield and greater accuracy, the Trident II would provide U.S. strategic submarines

17/ See "The Los Alamos ABM Assessment," Congressional Record (June 6, 1980), pp. S6429-36.

with some ability to destroy targets hardened against nuclear blast, such as missile silos or command posts, which is one important capability of the MX missile. Finally, should the United States decide to expand its sea-based strategic forces substantially, the larger number of warheads on the Trident II would help hold down overall system costs. 18/

Development of the Trident II missile will cost approximately \$9 billion to \$10 billion over the next eight years. In fiscal year 1981, the Congress provided \$65 million in development funds, and the Senate Appropriations Committee directed transfer of another \$33 million from other projects to the Trident II program. These sums are roughly the amount needed in 1981 to begin a program that could achieve initial operating capability by 1989.

An accelerated program could allow deployment of Trident II missiles by mid-1988. The acceleration would add a total of \$1.4 billion to baseline strategic costs in fiscal years 1982-1986 (see Table 7) and would require \$250 million in added 1981 costs. 19/ But, in the long run, total system costs might actually be lower

TABLE 7. INCREASED COSTS ABOVE THE BASELINE OF ACCELERATING THE TRIDENT II MISSILE PROGRAM, FISCAL YEARS 1982-1986 (In millions of fiscal year 1982 dollars, net savings in parentheses)

	1982	1983	1984	1985	1986	Total
Added Costs (or Savings)	750	730	770	(120)	(740)	1,390

18/ Congressional Budget Office, The U.S. Sea-Based Strategic Force: Costs of the Trident Submarine and Missile Programs and Alternatives (February 1980), p. 34.

19/ The added costs could prove substantially higher than the number cited above, perhaps by as much as \$1.7 billion. This would occur if the Administration proposed a lower funding profile than that assumed in the CBO baseline.

if the Trident II program were accelerated. Until the Trident II is developed, the United States will outfit its Trident submarines with Trident I missiles. By accelerating the Trident II program, however, fewer Trident I missiles might have to be bought and then replaced with Trident IIs after only a few years' service.

Tanker Programs

Decisions about strategic missiles and bombers will not be the only strategic force issues confronting the Congress over the next five years. The Congress will also need to decide upon the size and composition of the fleet of tankers that provide aerial refueling for strategic bombers and other aircraft.

The current fleet of KC-135 tankers was originally designed and built to provide aerial refueling for the B-52 strategic bomber force. Although the entire KC-135 force is assigned to the Strategic Air Command (SAC), only about half of its peacetime sorties are devoted to SAC missions. The remainder support conventional missions, some of which require long-range deployments. Requirements for tanker capability on these missions have been steadily increasing. In fact, the Air Force has recently indicated that the equivalent of 1,000 KC-135 aircraft would be needed in operational units to meet expected wartime requirements. Yet the total fleet of 615 operational tanker planes has not grown over the last decade.

As a consequence, the Air Force has developed, and the Congress endorsed, two major programs to expand tanker capacity:

- o Acquire a new, larger tanker, designated the KC-10; and
- o Install more efficient engines (termed "re-engining") on the KC-135 to increase its range and payload.

These programs would increase tanker capacity, but at substantial cost. DoD has already bought 12 KC-10 aircraft and may propose procurement of another 14. These would cost \$0.8 billion over the next two years. The baseline assumes re-engining of 288 KC-135 aircraft over the next five years, at a cost of \$5.7 billion. Re-engining the remaining KC-135 fleet would add another \$5.0 billion to this amount, for a total cost of \$10.7 billion.

The Congress must determine the most cost-effective mix of KC-10s, re-engined KC-135s, and KC-135s that have not been re-engined. The answer will depend in part on desired levels of overall tanker capacity. This, in turn, will depend on other policy decisions: tanker requirements generated by the Rapid Deployment Force and other conventional missions; the number of new manned bombers that are procured, and when they are bought; and the fate of the B-52 fleet if a new manned bomber is procured.

The most desirable mix will also depend on which aircraft missions receive priority in using increased tanker fleet capacity, as well as on the relative efficiency of the various tanker aircraft. Preliminary CBO analysis indicates that the KC-10 is the more attractive alternative, if additional tanker capacity is intended for conventional roles, such as support of the Rapid Deployment Force. 20/ CBO analysis has not proceeded far enough to suggest which ways of improving tanker capacity would be most cost-effective for strategic missions.

COMMAND, CONTROL, AND COMMUNICATIONS

One issue that will almost certainly concern the Congress is the ability of the United States to command, control, and communicate with its strategic forces. Since this issue does not deal with forces and has both near-term and longer-term implications, it is addressed in this separate section. 21/

Functions and Problems of Current System

The U.S. strategic command, control, and communications (C³) system includes an extensive collection of facilities and systems designed to control and direct nuclear forces prior to, during, and following a nuclear war. The system consists of early warning satellites and ground-based radars; specialized command centers, including command post aircraft; and elaborate communications systems. Functioning together, these components would

20/ A forthcoming CBO analysis, available in the spring of 1981, will cover these and other issues in more detail.

21/ This section draws on a forthcoming Congressional Budget Office paper.

alert authorities of a possible attack, facilitate an assessment of its approximate size and possible targets, and direct U.S. forces to respond as ordered by the President.

In recent years, improvements have been made in the U.S. C³ system. Nonetheless, many observers consider that the strategic command, control, and communications system is among the weakest links in the U.S. strategic posture. Missile warning radars, ground stations for early warning satellites, and primary command centers are vulnerable to nuclear attack, or even to sabotage, and might be destroyed within the first few minutes of a war. Enemy jamming, poor radio propagation due to atmospheric nuclear explosions, and electromagnetic pulse caused by nuclear blasts might adversely affect the performance of communications systems that relay messages to the nuclear forces. In addition, the current strategic command, control, and communications system was not designed to support recently declared changes in strategic doctrine. These changes reportedly emphasize both flexible responses to limited Soviet attacks and operations throughout a potentially protracted nuclear conflict.

Improving Trans-Attack Responsiveness

One approach to correcting these problems would enhance the capabilities of the current C³ system during the period of an initial strike against the United States (frequently called the "trans-attack" period). Such a period could last from minutes to hours, or even a few days. This approach characterized the thrust of the Carter Administration's program for improving command, control, and communications.

This option would procure additional warning sensors and improve existing ones to provide more timely and accurate information about an attack so that the President could better tailor retaliatory directives appropriate to the level of provocation, and in the very limited time available before Soviet warheads strike the United States. This option would also buy command posts and communications links that would help provide better control over the nuclear forces themselves. This might permit commanders to modify attack plans and redirect forces as circumstances change during the minutes to hours that might define the trans-attack period. Such an approach could add a total of \$1.5 billion to the baseline over the next five years, as Table 8 shows.

TABLE 8. INCREASED COSTS ABOVE THE BASELINE OF C³ MODERNIZATION ALTERNATIVES, FISCAL YEARS 1982-1986 (In millions of fiscal year 1982 dollars, net savings in parentheses)

Options	1982	1983	1984	1985	1986	Total
Improving Responsiveness in Trans-Attack Flexibility	710	270	140	180	150	1,450
Improving Endurance in Post-Attack Period <u>a/</u>	470	510	(260)	(230)	80	570
Improving Responsiveness and Endurance	730	790	200	260	230	2,210

a/ Net savings in this option result from cancellation of procurement of two E-4B command post aircraft.

The major disadvantage of this option would be its limited ability to endure and function over extended periods. The current system, even with the modifications discussed above, is characterized by limited numbers of critical yet vulnerable facilities, especially the land-based command centers, which could be destroyed quickly. While aircraft provide survivable command centers, they would require maintenance and runways in good condition to function for more than a few days after a nuclear attack. This limited system endurance creates doubt about the capability to control U.S. nuclear forces in a protracted conflict. Such conflicts have been discussed in recent years by the Secretary of Defense and reportedly were incorporated in Presidential Directive 59, which codified U.S. strategic doctrine.

Emphasizing Endurance

Recognizing the disadvantage of the first option, the Congress could choose to emphasize endurance as the primary objective

for modernization of the C³ system. Implicit in such an alternative is the conviction that nuclear war would be better deterred if the attacker knows he cannot destroy his opponent's command structure or wait until it collapses. Under this option, the most important initiatives would emphasize both ground mobility and selective reconstitution of communications systems to improve survivability and endurance. New systems would include ground-mobile command posts, transportable communications systems, and reconstitutable satellite systems. This option would add a total of \$0.6 billion to baseline costs over the next five years (see Table 8).

Improving System Responsiveness and Endurance

Of course, the weaknesses of the second option are exactly the strengths of the first. Thus, the Congress could decide to implement both approaches together. The total cost of this joint option would be an additional \$2.2 billion over the next five years.

This \$2.2 billion increase represents 1.7 percent of baseline strategic spending. The small relative size of this, the most expensive of the C³ options, suggests that the Congress might be more concerned with the desirability of these approaches than with their costs.

RECAPITULATION: MANY PROGRAMS UNDER WAY, BUT KEY ISSUES REMAIN

As was noted above, there appear to be relatively few programs that could improve strategic capabilities in the near term. For the longer term, the Congress has already begun development or deployment of a wide variety of strategic systems, which are reflected in the sharp growth in baseline strategic costs.

Key issues remain, however. MX missile costs could grow sharply, particularly if the Soviet Union responded to the deployment of MX with a major strategic buildup of its own. Concerns over this possible cost growth, coupled with environmental problems, could force major changes in the MX system, including changes in its basing mode and possible use of anti-ballistic missile defenses.

Problems with MX could also emphasize the importance of accelerating the Trident II sea-based missile program as a hedge

against delays or problems in the MX program. And, regardless of decisions about forces, the relatively cheap proposals to improve the ability of the United States to communicate and control its strategic forces might be a key issue before the Congress.

The large number of strategic programs already under way suggests that, while discussions of strategic forces will surely occupy an important part of the Congressional defense debate, the major initiatives may come in general purpose forces. The next chapters address these forces, beginning with those aimed primarily at deterring or, if necessary, conducting a major war in Europe.

CHAPTER IV. GENERAL PURPOSE FORCES: NATO-RELATED ISSUES

U.S. general purpose forces include all ground forces, all naval systems (with the exception of ballistic missile submarines), the tactical air forces, and those mobility forces assigned to airlift and sealift. General purpose forces contain most of the manpower and account for most of the funding for the U.S. defense establishment. These forces are sized to meet the demands of what is termed a "one and one-half war" strategy. The larger part of these forces is committed to the "full war," usually assumed to involve the defense of NATO Europe in a conflict with the Warsaw Pact. The remaining forces are required to conduct operations in a non-NATO conflict. Such a conflict might occur without NATO involvement, or it could precede a NATO/Warsaw Pact war, with both conflicts continuing simultaneously. The demands of a NATO/Warsaw Pact war, focusing on Europe's central region, provide the primary determinants of U.S. force posture and programming. 1/

ENHANCING NATO'S CAPABILITIES: AN ALLIANCE-WIDE EFFORT

For most of the post-World War II period, the United States nominally gave NATO the highest priority for the use of conventional forces, even during the height of the Vietnam War. After the drawdown of U.S. military stocks in Europe during the Middle East War of 1973, however, the state of Europe's defenses, and the U.S. contribution to them, underwent critical review. It was found that the Warsaw Pact, which long had enjoyed a manpower advantage in Central Europe, had invested heavily in new and more

1/ It is extremely difficult to assign precise cost figures to the U.S. commitment to defend NATO. While such figures often have been presented to the Congress by the Department of Defense, they tend to involve arbitrary assumptions regarding the use of forces that could be committed either to NATO or to non-NATO contingencies. Such assumptions, which may not be universally shared, include allocation to a NATO contingency of the U.S. training and support establishments, U.S. naval and amphibious forces, and U.S. strategic forces.

capable equipment for its ground and air forces. As a result, it appeared to have a theater-wide advantage immediately after mobilization of nearly 2:1 over NATO in "armored division equivalents," a frequently used analytical tool for measuring the capabilities of ground forces. ^{2/} This ratio was considerably higher than the 1.5:1 Pact theater-wide advantage that expert opinion suggested as the theoretical upper bound needed to assure a conventional defense of Western Europe. ^{3/} Of special concern was--and still is--the Pact's favorable ratio of tanks (2.7:1), armored personnel carriers for infantry (1.2:1), and artillery (2.2:1). ^{4/} The Pact advantage appeared to be greatest with respect to NATO's Northern Army Group (NORTHAG), composed of German, British, Dutch, and Belgian forces that have been assigned responsibility for defending the North German Plain (see Figure 3). NATO planners also found serious shortcomings in their reinforcement plans, which not only would move U.S. forces to Europe too slowly, given revised estimates of available warning time, but also failed to account for serious allied shortfalls in war reserve equipment and spare parts.

In response to these perceived shortcomings, the NATO allies adopted, in 1977, the Long-Term Defense Program (LTDP). The LTDP committed each member to seek 3 percent annual real growth in defense outlays for the five years covered by the plan. ^{5/} It also set specific goals for the alliance as a whole. These goals addressed the areas of improved readiness, reinforcement, reserve mobilization, maritime posture, air defense, command and control,

^{2/} The use of armored division equivalents for calculating force ratios is not universally accepted. Nevertheless, it is DoD's standard measure of combat potential. See Congressional Budget Office, Strengthening NATO: POMCUS and Other Approaches (February 1979), pp. 52-53.

^{3/} Ibid., pp. 11-12, 54.

^{4/} Ibid., p. 9.

^{5/} The allies committed themselves to striving to achieve the 3 percent goal. Because their budgets are expressed in outlays, their performance must also be measured in outlays. The commitment to real growth in outlays is clearly more limited than one for 3 percent real growth in defense obligations (budget authority) would have been.

Figure 3.

Corps Sectors of Military Responsibility in NATO's Central Region



SOURCE: Adapted from Richard Lawrence and Jeffrey Record, *U.S. Force Structure in NATO* (Washington, D.C.: The Brookings Institution, 1974), p. 31 and also from U.S. Army materials.

^a NORTHAG (Northern Army Group) and CENTAG (Central Army Group) are the two subdivisions of NATO forces in West Germany. The line dividing the two runs from Belgium through West Germany, just south of Bonn, and into East Germany.

logistics, theater nuclear modernization, and armaments planning and rationalization. 6/

The Carter Administration subscribed to the Long-Term Defense Program and put forward a series of programs consistent with—or responding directly to—its aims. These programs emphasize enhancement of U.S. ground force capabilities in the opening days of mobilization prior to a conflict with the Warsaw Pact. Programs to date have not proposed any expansion of U.S. ground force levels, nor have they called for any major expansion of Navy shipbuilding.

Thus, the Congress faces several key issues in considering programs to enhance the U.S. contribution to NATO:

- o Should the United States continue its emphasis on improving capabilities in the early days of a major European conflict?
- o Or should that emphasis be replaced by, or combined with, increases in force structure and shipbuilding?

This chapter suggests that the Congress has alternatives that would be consistent with either emphasis, or both. Improvements could be made in both the near and longer term. Which alternatives the Congress selects will be determined by the objectives it sets for U.S. conventional force capabilities.

Among the alternatives for near-term improvements are:

- o Provide full or expanded funding for POMCUS, an Army program to speed deployment of U.S. reinforcements to Europe by prepositioning divisional equipment there.
- o Increase ground forces based in the United States.
- o Procure fast sealift ships to speed deployment of troops to Europe.
- o Prestock Marine equipment in Norway and/or Denmark.

6/ The LTDP is summarized in Congressional Budget Office, Strengthening NATO: POMCUS and Other Approaches, pp. 63-65.

- o Homeport an aircraft carrier in the port of a Mediterranean NATO ally.
- o Increase funding for spare parts for Air Force tactical aircraft to improve their mission-capable rates.

Options for longer-term improvements include:

- o Increase NATO ground forces by eleven and one-half fully supported armored divisions, with the United States contributing five.
- o Concentrate U.S. shipbuilding programs on ships geared to long-distance projection missions, while the NATO allies assume responsibility for Atlantic convoy duty.

Influencing all Congressional decisions in this area is a key overall issue: the role of the NATO allies. If NATO is to improve its conventional capabilities, then the allies may have to match--or perhaps even exceed--U.S. efforts, particularly given the growing demand for improvements in U.S. military capabilities outside the NATO area. Yet none of the allies has matched the percentage of Gross National Product (GNP) that the United States devotes to defense. Furthermore, at least six of the allies have had difficulty even meeting the goal of 3 percent real growth in defense spending specified in the Long-Term Defense Program (see Table 9). This chapter points to the important linkages between U.S. and allied strengths when considering NATO forces and concludes with a section discussing the likely allied requirements imposed by the options discussed in this chapter.

NEAR-TERM IMPROVEMENTS FOR NATO: EMPHASIZING REINFORCEMENT AND READINESS

The following section highlights illustrative programs to enhance the ability of U.S. forces both to deploy rapidly to Europe and to be ready for combat whenever they are ordered to deploy. It also discusses the need for effective deployment of naval forces, so as to permit their timely involvement in the early stages of a possible NATO/Warsaw Pact conflict, while also supporting other requirements.

TABLE 9. COMPARISONS OF RECENT DEFENSE EXPENDITURES OF THE UNITED STATES AND THE NATO ALLIES (In percents) a/

	Defense Spending as a Percentage of GNP, 1979	Real Growth in Defense Spending, 1980
United States	5.2	3.1
Belgium	3.3	2.3
Canada	1.7	5.7
Denmark	2.0	0.7
Federal Republic of Germany <u>b/</u>	3.3	2.9
France	3.9	3.4
Great Britain	4.9	3.5
Greece	<u>c/</u>	<u>c/</u>
Italy	2.4	-7.7
Luxembourg	1.0	16.3
Netherlands	3.4	2.9
Norway	3.1	2.8
Portugal	4.0	<u>c/</u>
Turkey	<u>c/</u>	<u>c/</u>

SOURCES: Data on defense spending as a percentage of GNP taken from International Institute for Strategic Studies, The Military Balance, 1980-1981 (London, 1980), p. 96. Figures based on local currencies; GNP figures estimated where official statistics were unavailable. Data on real growth in defense spending taken from "Defence: The Special Case," The Economist (November 1, 1980), p. 17.

a/ These percentages do not reflect the full budgetary impact of manpower contributions by NATO allies with conscript armies.

b/ Includes aid to West Berlin.

c/ Not available.

The POMCUS Program

The POMCUS (Prepositioned Overseas Materiel Configured to Unit Sets) program is a major Army initiative to accelerate deployment of U.S. reinforcing divisions to Europe by storing division sets of equipment there. (Duplicate equipment is maintained in the United States for training.) In a mobilization, only the troops themselves and a small amount of remaining equipment would have to be moved from the continental United States, which could be accomplished within ten days.

By the end of 1980, the Army had prepositioned equipment for four divisions in Europe: the "2 + 10" package, 7/ the Reforger package, 8/ and a fourth division set. Two more division sets are scheduled to be prepositioned by the end of fiscal year 1982, and prepositioning of more than six division sets is under consideration.

Full Funding. Although the POMCUS program is key to the Carter Administration's program to improve NATO capabilities after mobilization, the program may be underfunded. CBO analysis found that the proposed budgetary plans of the Department of Defense through fiscal year 1986 could not fully fund even a six-division program, much less a larger one, while maintaining roughly current levels of equipment for U.S.-based active and reserve divisions. The funding shortfalls involve support and various combat-essential items (such as tactical communications equipment) and amount to \$800 million for the first six division sets and \$410 million for each additional set. 9/

Shortages also exist in prepositioned war reserve stocks—equipment required to support wartime operations while factories are converted to produce more materiel. Part of this shortfall

7/ The term "2 + 10" denotes a set of prepositioned equipment for two divisions plus ten support units. It was first used in response to the 1961 Berlin crisis.

8/ "Reforger" is an acronym for "Return of Forces to Germany." The Reforger equipment package supports one division, an armored cavalry regiment, and 74 nondivisional units.

9/ Congressional Budget Office, Costs of Prepositioning Additional Army Divisions in Europe (August 1980), p. 1.

has resulted from using reserve stocks to fill POMCUS sets. Bringing prepositioned war reserve stocks up to a minimum level would cost about \$1.85 billion over a five-year period. 10/

Still another requirement--as yet unfunded--that is critical to the POMCUS program is a logistics base in NORTHAG to support the three divisions that are scheduled to have equipment prepositioned in that region. A skeleton logistics base would cost approximately \$790 million over five years. 11/

Problems With POMCUS. The POMCUS program is closely tied to very specific assumptions about the length of warning time preceding a Warsaw Pact attack. If those assumptions are not correct, POMCUS becomes less useful, even if it is fully funded. POMCUS stocks would be highly vulnerable to a no-warning attack, for example, and would be of diminishing importance if warning time was measured in weeks rather than days.

POMCUS would also be less relevant in a protracted conflict. Even with POMCUS speeding U.S. deployments, the Warsaw Pact--and particularly the Soviet Union--could mobilize enough divisions to restore force ratios by the 35th day after mobilization. 12/ Thus, POMCUS might not provide a significant offset to the balance of forces in a conflict whose start is sudden or duration is prolonged.

Some of these problems, together with the funding concerns discussed above, led the Congress, in the fiscal year 1981 defense appropriations act, to prohibit any future expenditure for prepositioning the fifth and sixth POMCUS division sets without specific appropriations. 13/ This action came despite some

10/ Ibid.

11/ Ibid.

12/ Congressional Budget Office, U.S. Ground Forces: Design and Cost Alternatives for NATO and Non-NATO Contingencies (December 1980), p. xv.

13/ "Conference Report on H.R. 8105, Defense Department Appropriations, 1981," reprinted in Congressional Record (December 4, 1980), p. H11971.

discussion within the Carter Administration of expanding the POMCUS program to include as many as nine divisions. 14/

Alternatives to POMCUS: Force Increases or Fast Sealift

Force Increases. Current Congressional concerns about NATO strength emphasize the importance of considering alternatives to the POMCUS program. One alternative would create additional U.S. Army divisions, to be based in the United States. This approach would respond to concerns about capabilities later in a war, or in a war preceded by a long mobilization period. In addition, were the NATO allies and the United States to increase their force levels in order to add to NATO's defenses after the first month of mobilization, POMCUS might be less valuable to the allied position.

For example, if NATO added the equivalent of six fully supported armored divisions to its force levels, it could significantly improve its ability to maintain an elastic defense of Western Europe--one that would trade territory for the time needed to establish a defense. 15/ The U.S. share of such an initiative--based on relative sizes of the Gross National Products of the NATO allies as well as on other considerations--would be two divisions. The United States could add two fully supported armored divisions to its force structure within the next five years, probably not much later than the full requirement for six POMCUS division sets could be met. 16/ The cost of adding two fully supported divisions to the U.S. Army structure, in addition to filling equipment shortfalls in the four current POMCUS division sets, would be \$14.2 billion over the five-year period fiscal years 1982-1986.

Fast Sealift. A more modest alternative to POMCUS would involve procurement of fast sealift ships, such as the SL-7 class

14/ Congressional Budget Office, Costs of Prepositioning Additional Army Divisions in Europe, p. 3.

15/ See Congressional Budget Office, U.S. Ground Forces: Design and Cost Alternatives for NATO and Non-NATO Contingencies, pp. 79-80.

16/ Ibid., p. 86.

of container ships that the Congress funded together with the maritime prepositioning program in the fiscal year 1981 budget. Sixteen of these ships could move two divisions and their equipment to Europe within two weeks. (There would, of course, be some risk of loss of these convoys if the war had started.) These ships not only could be employed to reinforce Europe; they would also be valuable sealift assets for non-NATO scenarios. Thus, they need not be tied to the LTDP, and could merit consideration regardless of allied decisions. The procurement cost of these ships would be \$4 billion. (Because no new construction was required, procurement of the SL-7s cost \$285 million, with modifications to make them capable of rolling equipment on and off their decks estimated at an additional \$450 million to \$600 million.)

It is also possible to envisage circumstances in which the Congress might wish to reconsider the POMCUS program without taking compensatory steps. It might reason that the United States should not add to POMCUS stocks as part of its commitment to the LTDP if the NATO allies do not meet their commitment to the LTDP, namely to increase their defense budgets in real terms by 3 percent annually.

Prestocking in Northern Europe

Like the POMCUS program, the proposal to prestock Marine equipment in Norway, and possibly in Denmark, would enable U.S.-based reinforcements to deploy rapidly to northern Europe in the event of a crisis that might precede a major NATO/Warsaw Pact conflict (see Figure 4). ^{17/} (The Marines have been considered the prime candidates for such a program because they long have been designated as potential reinforcements for either or both countries in the event of hostilities on NATO's northern flank.) Unlike the POMCUS program, however, funds were not requested in fiscal year 1981 to fund prestocking of equipment in either Norway or Denmark, although agreement has been reached with Norway to prestock a Marine brigade there. The five-year cost of prestocking equipment for a Marine brigade in Norway could amount to \$209 million, excluding operating costs. Prestocking equipment

^{17/} This discussion draws upon analysis in Congressional Budget Office, The Marine Corps in the 1980s: Prestocking Proposals, the Rapid Deployment Force, and Other Issues (May 1980).

Figure 4.
NATO's Area of Concern in Europe and Western Asia



for as much as one Marine division in Denmark (that size may be required to reinforce Denmark) could cost \$1.5 billion, excluding operating costs. 18/

The Marines--which comprise only three divisions--have other missions within the overall context of the "one and one-half war" strategy, however. Prominent among these is their growing role as part of the Rapid Deployment Force (RDF). The Marines also continue to serve as a strategic reserve for NATO's forces in the Central Region. In the absence of increases in NATO force levels in that region, the demand for Marines in the Central Region might assume higher priority, so that few, if any, Marine units would be available for northern European operations.

In view of these factors, the Congress might consider that other allies, such as Great Britain and Canada, which contribute forces to the defense of the northern region, as well as the Norwegians and particularly the Danes, might provide additional forces for the defense of that area. Such contributions would facilitate a redistribution of NATO's defense burden to permit the Marines to operate in areas that might be formally outside the geographic boundaries of the NATO alliance, but involve economic interests as critical to Europe as to the United States.

Maintaining a U.S. Naval Posture in the Mediterranean

Ground forces are, of course, not the only forces that would determine the outcome of a European war. Naval forces would also play a major role. For nearly 30 years, the United States deployed at least two carrier battle groups in the Mediterranean Sea. These deployments embodied a general U.S. commitment to NATO to provide two naval task forces to support NATO units within 48 hours of the outbreak of a conflict with the Warsaw Pact. The carrier forces also represented a symbol of more specific U.S. commitments: the security of Israel and, more recently, of Egypt; and the defense of Greece or Turkey, or both, in the event of a Warsaw Pact attack on their territory. Since late 1979, however, the United States has maintained two carrier battle groups permanently on station in the Indian Ocean. In order to do so, and to limit the time that sailors had to spend continuously at sea, the Navy had to reduce its forward-deployed Mediterranean

18/ Ibid., p. 55.